Seminar Paper
Advanced Topics in Social Network Analysis

Title: Gender Effect on Harnessing Social Capital

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1. Abstract

“Is it a boy or a girl?”

The above is typically the first question asked of a new-born baby. Across the diversity of human societies – from the third world to the first world, conservative to liberal, religious to secular – the question of gender arises at the very beginning of life and plays a central role throughout. Human experiences and perspectives, the way they relate to each other and the expectations society places upon them – all are shaped by this accident of birth.

If humans are a gendered species, they are also a social one. While modern technology continuously provides new tools for socialising and building networks, humanity remains as gendered as the early *homo sapiens* at the dawn of the human race or, if one prefers, as Adam and Eve. Clearly, these two facets of humanity – its gendered nature and its social nature – interact with and influence one another on multiple levels.

2. Introduction

The interaction between gender and social network is an expansive area of study and an important one.

This paper discusses – and offers some answers to – the question of what difference gender makes to the way we seek to use our networks to harness social capital, and to our own level of success in harnessing it. It rests on three key pillars: (1) our own intuition, thoughts, experiences and observations as young women living in a human society; (2) our readings and analysis of related academic works; and (3) our own research, the methodology and results of which are discussed in detail below.

Let us begin with a note on some of the key terminology used in this paper. We fully accept that some of these terms are themselves complex areas of study and may be open to different interpretations. Let us clarify what we mean by these terms when used in this paper.

“Social capital” generally refers to our social network and our contacts (our friends, acquaintances, business contacts and wider circle) as if it were an economic resource – something with a value. Not necessarily a financial value, but a value – something that has the potential to be transformed into things that can bring us concrete benefits which either propel us forward in our lives or which make life more enjoyable or enriching. This could be as simple as being friendly with a nightclub owner who can ‘hook us up’ with a table on short notice, allowing us to impress an important business contact on a night out by appearing to be well

connected. Or it could be finding a lifelong friend and mentor who can steer us through key moments in our life.

“Harnessing” simply refers to the ability to convert a potential nugget of social capital into an actual realised or realisable benefit. It’s the difference between “knowing” a person (e.g. having their contact details or being connected to them on an online social network) vs. the ability to actually convert that contact into results.

“Social network” refers to any social network in the broadest sense. Let us make clear – We may be millennials, but we fully appreciate that “social network” does not necessarily mean an *online* social network like Facebook. We understand that social networks have existed for centuries and that Facebook is simply a piece of technology that helps us to maintain our social network -- it is arguably not a social network in itself. However, we have tended to focus on online social networks in our study. That is simply because online social networks are easier to study and to measure. A typical Facebook user can tell you (with reasonable accuracy) how many friends they have, the gender split, geographic split, etc (e.g., Hayat and Mo, 2015; Hayat, Samuel-Azran, and Galily, 2016). The technology exists to measure who “added” who, in a way that isn’t possible in real-world social networks.

3. Related Work

Szell and Thurner’s (2013) research based on an online game society studied differences between people in relation to joining these communities and forming a personal social network within them. The gameplay societies based on interactions, socializing and role-playing provide copious amounts of data regarding friendship, cooperation, or competition between different sexes. Results concluded about females include that they are less-risk taking but wealthier, attract positive behavior, show homophily, have more communication partners, and organize in clusters.

Results concluded about males include that they are heterophiles, respond fast to female friends and slow to female enmity alternatives, prefer well connected communication partners and stability in their local networks. In conclusion, males have better connected networks, while females have more people in their networks.

In Mark Lutter's article in the *American Sociological Review* "*Do women suffer from network closure? The moderating effect of social capital on gender inequality in a project-based labor market, 1929 to 2010*," Lutter focuses on gender disadvantages in regards to career advancements in the film industry. It is shown in the article that studies were concerned with cohesive same sex, less powerful groups – a "Closure Penalty" for women, and advantages for women who build networks that are open, diverse, and high "info-flow-data-research (1929-2010). Profiles done on the performance of actors and productions shows results of female actors having a higher risk of failure (in regards to their career) due to male colleagues but, have higher chances of survival with a better structured network. On pages 329-330 the reader can see that "social capital... reduces information and search costs, matches supply with demand, and positively affects individual career advancement." Best implemented in project based labor markets where recruitment depends on interpersonal networks like Film for example, but also has a dysfunctional side effect: exclusion -gender inequality is more abundant in cohesive projects while diversifying leads to non-redundant, non-exclusive and more info-flow in projects because of fewer network constraints and exploiting external weak tie relationships (Network closure vs. Network "betweenness") [Coleman 1988] shows that strength of weak ties divisions vs. habitus (film-gender-status-biased-info-flow).

S.G. Mazman (2011) usage purposes of social networks study about men vs. women) was conducted through the social media platform Facebook. The study primarily focuses on how people maintain relationships; create relationships, using them for academic purposes and for a

specific agenda. Also showing how cooperative activity shaping identities -usage purpose= motivations.

D'Exelle (2011) gender/network formation study deals with content & segregation (structural characteristics influence benefits generated pg.32). In this study 100 rural households located near the Honduran/Nicaraguan border were selected. The study provides us with evidence for the following: "The poorer and smaller in size the community is the better the communication and cooperation is, the participation of women in social networks is beneficial for generation of income, risk reduction/minimization and environmental protection." (Jose Molina's 1998). This equals access and control over resources, bargaining power and collective action for awareness and marginal changes about gender norms.

Bina Agarwal (2000) researched topics within the umbrella of social relations: friendship, support, social public activities, economics and relationship with neighbors (pg. 39). Reciprocity and symmetry in the relationship is important for social network analysis -time, capital and mobility (pg.45) are determinants of relationships. They want us to look at social networks as the dependent not the independent.

Rutashobya et. al. (2009) Tanzanian gender influence study researched egocentric networks and entrepreneurial outcomes in Asia and Africa along with strong kinship structure (Brindley, 2005; Brush, 1992; Martin et al., 2005), it was concluded that in all OECD (Organization for Economic Cooperation and Development) countries women encounter social structures in work, family, and social life that influence the development of human and social capital. For the most part this differs from those of the men of the communities. These networks with strong interaction skills have a huge effect on successful career paths. Two forms of social networks are discussed in the literature; those that provide social mechanisms that protect exchanges from the problems produced during collective action in established connections and those that provide an exchange setting for valuable information, assistance, and social insurance outside economic exchanges

(Rutashobya, pg. 69) It is shown that social capital defines how deep and how long the networks will connect the people into a long-term relationship.

Anderson and Jack (2002) ; Sandefur and Laumann (1998) ; Hayat, Lesser and Samuel-Azran (2016)

Three important benefits provided by social capital have been identified:

- a) It's ability to facilitate or hinder the flow of information (Information)
- b) The controls of one's own influence and the control over others. (Influence and control).
- c) The potential it provides for social solidarity. (Social Solidarity). Homophily increases the ease of communication; improves predictability of one's behavior; helps foster relationships of trust and reciprocity.

(Kanter, 1977) explains the social capital paradigm also distinguishes between weak and strong ties, and advocates that weak ties engender instrumental benefits.

Granovetter (1973) argues that weak ties are the way social ideas, influences, and information reaches people. Moreover, he explains that strong ties only bond similar people, which leads them to share the same sources. This determines that homophilous ties will tend to be stronger than heterophilous ties but that heterophilous ties are more diverse and beneficial, but is dependent on the specific network. Furthermore, Granovetter explains that relationships among network details and resource access for the most part is difference for males and females.

Therefore, the social capital benefits one creates for himself/herself is dependent on gender differences in network relationships. In the patriarchal societies we live in women automatically have the lower position in society. The large amount of stereotypes and biases against women as incompetent human beings hold them back from developing instrumentally useful heterophilous ties with other functioning members of their society and workplace, while currently this research determines to find valuable data pertaining to women fighting the stereotypes to be stronger at harnessing their social capital.

4. Research Question and Hypotheses

At various points in our lives – perhaps on an almost daily basis – nearly all of us will seek to use our relationship with another human being – be it social, romantic, professional, familial or other (or a combination thereof) – in order to realise a concrete benefit for ourselves or for someone or something of importance to us. We will seek to *harness our social capital*.

Examples will range from the trivial to the critical, from the everyday to that once-in-a-lifetime favour. Some instances of harnessing will be perfectly ethical and normal (*asking a friend from Japan to give you tips on restaurants in Tokyo*). Some will be manipulative (*asking a close friend if you could borrow some money while employing a tacit threat that the friendship will be terminated if they refuse*). Some will smack of overt social climbing or leveraging (*asking a friend to get you invited to an exclusive social or sporting event or an internship in a prestigious company*). Still others may be downright unethical or even illegal (*asking a friend in the police force to make a speeding ticket ‘go away’*).

We “harness” our social capital whenever we successfully convert our social contacts so as to deliver concrete results like those above. It is not only the person seeking the favour who harnesses their social capital. Very often, the person granting the favour is harnessing their social capital as well. A Middle Eastern prince may have the ability to host lavish parties on his yacht. Although he may be the one hosting the parties and providing the venue, he is also (by bestowing invitations on the lucky few who are invited) building a patronage network. When we allow ourselves to be “*harnessed*”, we are building up an invisible booklet of Starbucks coffee stamps – a complex interlocking system of “*I owe you ones*”.

An extreme example of this system can be observed in the workings of a dictatorship. Members of the regime will seek to harness their connections with the leader in order obtain business and

other benefits for themselves. But this also benefits the leader, by creating a pyramid in which the VIP lifestyles of an entire inner circle is all dependent on one man. This puts him in a very powerful position.

However, we hypothesize that the ways in which we seek to harness social capital – and the opportunities to do so which are available to us – will differ considerably depending on the gender of: (1) the person seeking to harness; and (2) the person being harnessed. We hypothesize that much of this is due to the relationship between: (1) sexual dynamics; and (2) power.

In most human societies, power has traditionally been (and largely still is) concentrated in the hands of men. If we find ourselves in the position of needing to harness a social contact, the person whom we need to harness is more likely to be a man. Examples include:

a) if I want to reserve a table in a restaurant or nightclub and am having no luck with the door staff or promoters, I may be able to bring the matter to the attention of the ultimate owner. He will usually be a man;

b) if I am starting my own business and want to raise money from investors, I may approach an angel investor network. I may approach the representative of an Arab sheikh. I may approach a partner in a private equity fund. I may approach a senior person in a bank. In all cases, he will usually be a man;

c) if I desperately want an internship in a prestigious organisation for next summer and have poor grades and am having no luck with the ‘official’ HR department, I may approach the president of the bank, a partner in the law firm or the CEO of a company. In all cases, he will usually be a man;

- if I need a reference from a world-class professor to get me into grad school or into a prestigious job, he will usually be a man; and
- if I am stopped by the traffic police and want to be let off a ticket, the decision maker (police officer) will usually be a man.

Layered onto this power structure are gender roles and gender norms, which dictate behavior. Traditional society dictates that the lead role in initiating a sexual relationship should be played by a man. A woman should be wary about playing this role, as it may damage her reputation and it could even be dangerous as it may lead to her being raped. There is also the evolutionary reality that a woman can produce only a limited number of offspring in her lifetime and must therefore be selective about her breeding partners, whereas a man could (in theory) father tens of thousands of children in his lifetime and therefore need not be so picky.

This contributes to an environment in which any approach *by* a man *to* a woman may be viewed as a potential sexual advance, whereas an approach *by* a woman *to* a man is less likely to be so. Women – it is assumed – are looking for a more complicated range of attributes in a man (e.g. job, education, reliability, ability to provide, unlikely to abandon her or her offspring). She will therefore harness thousands of male contacts in her lifetime who she has no intention of breeding with. A man on the other hand – it is assumed – is looking for a much lower level of compatibility – he is essentially interested in any woman who appears to be fertile (physical clues of fertility play a large role in what is considered ‘beautiful’). Therefore, in a man’s life, thousands of the social harnessing he conducts will be with women who fit this very basic requirement. He is therefore likely to view these social contacts as potential breeding opportunities.

Of course, we understand that much of this hypothesis rests on a generalization. Of course we understand that the power imbalance between men and women is not static – in some Western countries (e.g. Iceland, Norway, Denmark, Sweden or Finland) the difference is far less than in some Middle Eastern countries like Saudi Arabia. And of course we understand that not all men and women conform to these stereotypical gender roles --- there are women out there who will chase after men, there are young men who may use their physical appearance to gain a promotion from a senior woman executive, and there is a whole spectrum of sexualities which

complicates things further. There are people who are asexual and therefore harness social capital in a manner that is completely unaffected by sexual dynamics. There are lesbians and gay men whose contact with the opposite sex may again be completely unaffected by sexual dynamics. But generally speaking (and this paper deals with the general) these issues will hold true. Moreover, when we tap into our social network to gain a benefit, we often aim for the top. If we really need that table in a nightclub and we're standing in the street shivering cold at half past midnight, we'll call the owner. If we desperately need that internship, we'll call the CEO. And in general, the more powerful people tend to be the ones who have built up more experience, who have built up bigger networks, who have built up more wealth and who have risen up the ranks. They tend to be – in one word – *older*.

And older means two things. First, it means these powerful people made their name in an earlier era (e.g. ten or more years ago, when the power imbalance between men and women was greater) and thus they are holdovers of this earlier age. Second, it means they have 'stayed in the game' longer – they have not quit their field of expertise at the age of 30 to be a full-time stay-at-home parent. For both of these reasons therefore, they are likely to be *men*.

Men and women therefore have different opportunities – different strengths and weaknesses – when it comes to harnessing powerful male contacts in their network. The differences are many but they ultimately all boil down to this:

Women have a greater opportunity to use sex (either the real or imaginary prospect of it) in order to gain results from powerful men. This opportunity is less commonly available to a man. This gives women a theoretical advantage (assuming they would be comfortable to use it, which many would not be). However, it also comes with a number of related disadvantages, including: (i) they may come across as less convincing or be treated as a joke or a mere trophy; (ii) it may cause damage to their reputation in society; (iii) it may put them at risk to their health or safety; (iv) men may sense they are being targeted by a 'gold digger' and react very negatively; and (v)

it may detract from the efforts of a woman who is not seeking to use sex as a means of gaining a concrete advantage, by tarring all women with the same brush.

Equally, it also gives men an advantage because: (i) they can approach powerful men without their approach being misconstrued; (ii) their message will be taken seriously and will not be drowned out or lost in personal or sexual complications; and (iii) they can harness without concern as to their own safety or reputation.

In addition, men and women's core friendship circles tend to be of their own gender. Let us assume a man and woman are at law school together. The man has ten "guy friends" at law school. The woman has ten "girl friends" at law school.

Fast forward 15 years:

Three of the man's "guy friends" are now partners in leading law firms. One is the district attorney. One is a judge. One is the general counsel of a large company and the other four went into business. Three of them have become important clients of the man. The man's "guy friends" have blossomed into a group of potentially very useful social contacts.

Of the woman's 10 "girl friends", 5 are now stay-at-home moms. Two left the legal profession in search of a 'work-life balance' and are working as teachers. One has joined a non-profit organization. The woman's "girl friends" have turned into a far less useful social network.

These realities, expectations, norms and gender roles will all dictate the way men and women seek to harness their social capital. We have sought to measure the different ways in which men and women use their social networks. Set out in the Appendix is a list of the questions we asked 30 participants via the online survey platform called Typeform.

5. Methodology

The study is a qualitative, observational design research. The population studied is 30 random, anonymous users from our social networks and the Facebook group called *Secret Tel Aviv*, which is comprised of a group of largely young Tel Aviv residents from various countries (it is oriented towards international students and foreign-born residents of Tel Aviv). The sample was selected using simple random sampling by distributing the online survey rather than finding participants. The independent variable is career while the dependent variable is the ability to harness social capital. The instrument used for this research is an online survey created on “Typeform.com,” that asked the participants about their social networks. All the participants voluntarily took the survey without any pressure or rewards promised.

The process began with thorough research of social networking and how the ability to use it to one’s advantage can lead to a fulfilling career paths. Then the survey was created online, distributed online, and then the first 30 were selected. The survey was available through the links online for 2 weeks. The results of the survey was analyzed and categorized to help establish new data and understanding of social capital power.

6. Results

The survey answered by 30 participants contained 24 questions that were qualitative and quantitative.

The majority of participants were aged 18 to 24 (57% of the population sample), while 33% were aged 25 to 34, 7% between 35 to 44, and 3% were aged 45 or above. The ratio between sexes was roughly equal with 53% female and 47% male (16:14) participants. Most of the population with a high of 60% were single, while 30% in a relationship, 7% married and 3% chose to write out complicated. 100% of the population chose the sexual orientation of straight.

Would you consider yourself to be religious?

27 out of 30 people answered this question

Average: 2.26

For the Likert scale of religiousness the average came out to be 2.26 out of 5, 1 being not religious to 5 being extremely religious. Most of the population spread out evenly between 1-3, while three participants evened out the scale by selecting 4 & 5. A limitation is that 3 participants did not answer. When asked what characteristic best described the participant, 70% chose open-minded, 17% selected independent, 10% picked private and lastly 3% picked open. None of the participants selected group-oriented. About 71% of the population selected their political position to be liberal while 29% picked conservative. When asked about what social networks the participants used all of them selected Facebook, which is self-explanatory because the survey was distributed through Facebook. Then going down from most used to least used by the population is Instagram, LinkedIn, Twitter, Tinder, Pinterest and one participant added their own choice of Snapchat. Next on the Likert scale, the population selected how active they believed to be online and the average came out to be 3.38. Most of the population (73%) believed the gender balance of their social networks to be roughly equal. 52% of the participants found themselves under the category of viewer but not too few are actually putting input into their social networks by supporting (31%) or contributing (17%). A limitation is that one participant did not answer

this question. When asked about privacy settings most (40%) of the population sample fell under the medium level while 47% combining levels 4 & 5 choose higher privacy levels and a low 14% combining levels 1 & 2 don't care for privacy. Next, when asked about what percentage they perceived of their social network to have never physically met before 66% chose 0-24%, 21% chose 25-49%, 7% chose 50-75%, 3% chose 0% and lastly no one chose 50-74%. When asked about random people messaging the participants from the opposite sex it revealed a gender difference in networking. The data revealed that the 37% that said they would not answer a message of the opposite sex, were mostly female while the 33% that said they would answer at face value were mostly male. This also rolls over to the other options where suspecting negative motivations based on sex came from women and suspecting negative motivations based on money came from men. The other two answers came from two women where one said she would answer after two days and the other said it depends. In addition, when asked how confident the participant is in asking for help the majority all were in the average medium area while few fell to the sides, but most revealed the comfort they have in their social networks.

how confident are you in reaching for help?

28 out of 30 people answered this question

Average: 2.71

Qualitative

is your hometown? Where do you live curr	What is your occupation?	What/who led you to this occupation
ן, Tel Aviv	Student, parents	
ןgeles	Herzliya	student
na	Raanana	System analyst
	Honolulu	Sales rep
ןw	Israel	Student
ןot	Tel Aviv	teacher
(Germany)	Tel Aviv	Researcher (Field of Psychology & Sociology)
ןines	Tel Aviv	Diplomat
ן	London	Unemployed
	London	
ן	London	Student
ן	London	Event manager
ן	LA	Social media manager
	Rome	Unemployed
lem	herzliya	art consultant
ise, California	Sydney, Australia	Hotel Front Office
ן, Tel Aviv		Intelligence, studying International Relations
ן Arab Emirates		Attorney
ןgeles	Los angeles	Front desk receptionist
ampton Ny	Gypsy nomad	Student
ן	Tel Aviv	Security Risk Analyst
	Switzerland	Journalist
viv	Ramat gan	Computer programmer
ןgeles	America	
	Jaffa	
ן d'Ajuda	Tel Aviv	Program Manager
viv	London	Student - Architecture
	Raanana	student
ןph New Jersey	Tel Aviv, Israel	Activist, Entrepreneur, Lover
	Los Angeles	Contractor

Above represents female (the top half) versus male (the bottom half) in context to where they are from, where they live, what their occupation is and how they got into that occupation. The participants are clustered in or around two cities – Tel Aviv and London – with outliers based in Italy, California, Germany, Switzerland and the United Arab Emirates.

how many people would you estimate are in your online social network vs. offline social network?
1000, 70
1000 vs 100
200vs30
800 vs 50
2000 vs 100
300
500vs50
1500 vs 500
900 vs 100
1000 vs 800
5000 vs. 20
1500 vs 100
1100 vs 60
150 vs 100
600, 100
2000
900 vs 30
900 vs 45
600 vs 50
500 vs 50
750 vs 75
300 vs 80
500 vs 20
420
4000 vs 70
300 vs 20

Here to the left reveals the difference in opposite sex perception of their own social networks online versus offline with females on the top, and males on the bottom. Women show larger numbers of online and offline networks while men have smaller quantities of people in their social networks online.

6. Discussion

The survey was conducted electronically and anonymously, therefore hopefully leading to more honest responses. It was a balanced mix of men and women, detailed and had well thought-through set of questions. Limitations of the respondents were that they were largely within a particular age range, there was limited socio-economic diversity because the respondents were all social friends of the authors of the study other than several random participants from an open group on Facebook (Secret Tel Aviv) and there was very limited ethno-demographic or religious diversity. The respondents were largely situated in one country – Israel – which has a highly untypical population. Although our survey enquired only as to participants' *level of religiousness* and did not ask them to report *which religion* they followed, we believe that the respondents are predominantly Jewish, which would not likely be the case where the survey conducted in any other country in the world. Gender differences and gender role dichotomy may be more pronounced in other religious or ethnic groups (notably Muslim and Arab society). More limitations include that the participants were all straight, some participants chose to skip religious/political questions. Furthermore, nobody chose group-oriented on the question asking what characteristic best describes you but it is possible because it is at the bottom of the list. Most participants answered open-minded which made most answers similar instead of having diversity in the sample population.

7. Conclusion

We hypothesized that men and women have different opportunities to harness social capital and that they choose to do so in different ways. We hypothesized this was due to underlying societal gender roles and differences in the life realities of men and women. We expected that these differences would be borne out in our research and our study, which was conducted largely by means of our survey.

Overall, the study does show distinctions between men and women. The differences are measurable but less pronounced than may have been expected. We suspect this may be due to: (i) the sample group being younger, more affluent, more urban, more liberal and more cosmopolitan than the norm, and hence exhibiting less gender difference and less strict adherence to gender norms than would be shown in a broader societal survey; and (ii) possible underreporting of certain trends.

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